# ACUTE DATA

| SPECIES | $EC_{50}/LC_{50}$ (µg/l) | TEST TYPE[a] | DURATION (HOURS) | SMAV[b] (µg/l) | GMAV[b] (µg/l) | REFERENCE NUMBER |
|---|---|---|---|---|---|---|
| Cladoceran | 41,000 | S,U | 48 | 54,539 | 49,319 | 1 |
| *Daphnia magna* | 43,000 | S,U | 48 | | | 1 |
| | 55,000 | S,U | 48 | | | 1 |
| | 56,000 | S,U | 48 | | | 1 |
| | 94,000 | S,U | 48 | | | 1 |
| | 100,000 | S,U | 48 | | | 1 |
| | 18,000 | S,U | 48 | | | 2 |
| | 85,200 | S,U | 48 | | | 3 |
| | 7,752[f] | S,U | 48 | | | 4 |
| Cladoceran | 39,000 | S,U | 48 | 44,598 | | 1 |
| *Daphnia pulex* | 51,000 | S,U | 48 | | | 1 |
| Cladoceran | 56,000 | S,U | 48 | 56,991 | | 1 |
| *Daphnia cucullata*[d] | 58,000 | S,U | 48 | | | 1 |
| Midge | 64,000 | S,U | 48 | 64,000 | 64,000 | 5 |
| *Chironomus thummi* | | | | | | |
| Flagfish | 28,280 | F,M | 96 | 28,280 | 28,280 | 6 |
| *Jordanella floridae* | 3,100 | R,M | 96 | | | 6 |
| Bluegill | 45,000[e] | S,U | 96 | | | 7 |
| *Lepomis macrochirus* | | | | | | |
| Fathead Minnow | 21,900 | F,M | 96 | 36,469 | 36,469 | 8 |
| *Pimephales promelas* | 40,700 | F,M | 96 | | | 8 |
| | 66,800 | S,U | 96 | | | 8 |
| | 45,000 | F,M | 96 | | | 9 |
| | 44,100 | F,M | 96 | | | 10 |
| | 44,100[c] | F,M | 96 | | | 11 |
| Frog | 43,400 | R,U | 96 | 43,400 | 43,400 | 12 |
| *Xenopus laevis* | | | | | | |

[a] S= static; F= flow through; R = renewal; U = unmeasured; M = measured.
[b] SMAV = Species Mean Acute Value; GMAV = Genus Mean Acute Value
[c] Duplicate data not used to calculate the SMAV.
[d] Data for nonresident species not used to calculate the GMAV.
[e] Data not used to calculate a SMAV because this data, as published in Buccafusco (1981) indicates the presence of a precipate during the test.
[f] Data not used to calculate the SMAV because it varies by more than a factor of 10 from the remaining data for this species.

# CHRONIC DATA

| SPECIES | CHRONIC VALUE (µg/l) | METHOD | SMCV[a] (µg/l) | GMCV[a] (µg/l) | REFERENCE NUMBER |
|---|---|---|---|---|---|

No Chronic Data Available

[a] SMCV = Species Mean Chronic Value; GMCV = Genus Mean Chronic Value.

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# CALCULATION OF ACUTE AQUATIC VALUE (AAV)[a]

| Data Requirement OAC 3745-1-36(A)(1) | SPECIES | GMAV (µg/l) |
|---|---|---|
| (b) | Flagfish | 28,280 |
| (c) | Fathead Minnow | 36,469 |
| (d) | *Daphnia spp.* | 49,319 |
| (f) | Midge | 64,000 |

Secondary Acute Factor (SAF) = 7.0

Secondary Acute Value (SAV) = Lowest GMAV ÷ SAF
= 28,280 ÷ 7.0
= 4,040 = 4,000 µg/l

Tier II Acute Aquatic Value (AAV) = SAV ÷ 2
= 4,040 ÷ 2
= 2,020 = 2,000 µg/l

# CALCULATION OF CHRONIC AQUATIC VALUE (CAV)[a]

Experimentally determined Acute-Chronic Ratios (ACRs):

| SPECIES | ACUTE VALUE (µg/l) | CHRONIC VALUE (µg/l) | ACUTE-CHRONIC RATIO | SPECIES MEAN ACR |
|---|---|---|---|---|

None Available

Secondary Acute-Chronic Ratio (SACR) = $\sqrt[3]{(18)(18)(18)} = 18$

Chronic Aquatic Value (CAV) = SAV ÷ SACR
= 4,040 ÷ 18
= 224 = 220 µg/l

[a]See Ohio Administrative Code 3745-1-36 effective February 22, 2002.